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10/725,355	12/01/2003	Sydney Keith Seymour	030627/268881	1296
826	7590	11/08/2007	EXAMINER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/725,355	Applicant(s) SEYMOUR ET AL.	
	Examiner Dennis Cordray	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-12,14-19,22-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-12,14-19,22-29 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's amendments and arguments filed 9/5/2007 have been fully considered but have failed to overcome the previous grounds of rejection.

Applicant summarizes the features of the three references used in the rejection and argues 1) that their combination is not obvious unless the prior art suggests the desirability of the combination, 2) that the fact that the modifications required by the combination were within the ordinary level of skill in the art and that the aspects of the claimed invention were individually known in the prior art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references and 3) that the allegation of obviousness from the combination comprises an evaluation of the "gist" or "thrust" of the claimed invention instead of consideration of the combination of elements as a whole.

To support the arguments, Applicant contends that the Bokelman patent describes an optical inspection system that generates data indicative of the spacing between bands, width of the bands, and contrast of the bands and does not generate a signal to contemporaneously trigger a testing device. Applicant also contends that the band detection system in the Seymour patent is in the context of a cigarette manufacturing process and is not relevant to a testing device. Applicant further contends that the detection device in the Cholet patent is not separate and discreet from the testing device, but is the same device, and that the testing does not occur in contemporaneous response to a band detection signal. Applicant also indicates that Cholet describes detection of the periodicity of bands on the cigarette paper by a serial

millimeter by millimeter permeability test as the "only option for positioning of the strips" for the later measurement stage because the successive segments cannot be distinguished visually.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding the argument that there is no suggestion or teaching in the references to combine the prior art, recent court decisions have foreclosed the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See *Ex parte Smith*, --USPQ2d--, slip op. at 20. (Bd. Pat. App. & Interf. June 25, 2007) (citing *KSR*, 82 USPQ2d at 1396), (available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

Bokelman et al discloses one or more inspection stations positioned between the unwind bobbin and the rewind bobbin to analyze the properties of the paper and suggests that the disclosed inspection device can detect the spacing, width and contrast of the bands (col 2, lines 33-43). At least one of the inspection stations is a band detection device to discriminate between band and non-band regions (col 2, lines 47-67). The measurement of permeability is revealed by Cholet as an important parameter in paper strips having alternating layers of porosity (p 1, pars 1-4). Gas permeability and porosity are used interchangeably and have the same units, CORESTA (if evidence

is needed, see Zawadzki et al, US 2003/0164173, p 3, pars 40-42). It would have been obvious to one of ordinary skill in the art to modify one of the inspection stations of Bokelman et al to measure this important property to save time and the cost of having to measure the permeability in a separate process. The teaching to one of ordinary skill in the art from Cholet would have been the method of measuring permeability, not the detection of the bands. The band detection and computation procedure of Cholet would not have been necessary due to the band detection device of Bokelman, again saving time and cost. The use band detection devices to send signals to control other related processes is disclosed by Seymour et al (US 2004/0122547), thus was also known to those of ordinary skill in the art at the time of the invention. All of the disclosed measurements are nondestructive. It would have been obvious to use the band detection data to detect the bands and generate signals to control the measurement of the porosity data. Contemporaneous control would have been obvious to ensure accurate and efficient measurements. The motivation would have been to provide additional important data with less expenditure of time or money, as indicated in the rejection. The band detection device and porosity measuring device would have been performing the same functions as when used separately and results of the combination would have been predictable.

The rejections are maintained and have been modified to incorporate the amendments and to better clarify the Examiner's position.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5-6, 8-12, 14-15, 17-19, 22-23, 25-29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bokelman et al (5966218) in view of Cholet (WO 03/019132 A1, US 2004/0187560 used for English translation) and further in view of Seymour et al (US 2004/0122547).

Claims 1-2, 4-6, 8, 18-19, 21-23, 25-26 and 28-31: Bokelman et al teaches that it is known to inspect a banded cigarette paper, which comprises a repeating pattern of first and second bands, by unwinding it from a first bobbin, inspecting the paper between bobbins, and rewinding the paper onto a second bobbin. Bokelman et al discloses a procedure and apparatus for examining banded cigarette wrapping paper. The paper is unwound from a first bobbin and wound onto a second (rewind) bobbin. One or more inspection stations (testing device or pattern detection device) can be used between the bobbins to determine properties of the paper. In particular, the band pattern on the paper is detected by one of the inspection stations via analysis of reflections from an elongated beam of light directed onto the paper (Abs; col 2, lines 38-43). The band or pattern detection device is thus configured to receive the paper unwound from the first bobbin. The pattern detection device communicates with a remote computer, thus generates a signal in response to the analysis that is analyzed to determine the spacing, width and average contrast of the bands (col 2, lines 54-59). A magnetic braking device cooperates with the first bobbin to control the tension in the

paper (col 4, lines 27-33). The paper is wound onto the second bobbin by using a drive wheel to induce rotation of the second bobbin through frictional contact (col 5, lines 1-8).

Bokelman et al does not disclose that a testing device for nondestructively measuring a material property or that the pattern detection device and testing device are in communication with one another. Bokelman et al also does not disclose stopping the paper at selected positions so that individual bands could be tested.

Cholet discloses an automated testing apparatus and method for determining the permeability of a porous material having alternating porosity levels. The porous material can be a cigarette wrapping paper with bands of alternating porosity and the testing can be performed on an individual band. The measurement of permeability is revealed by Cholet as an important parameter in paper strips having alternating layers of porosity (p 1, pars 1-4). The measurement apparatus comprises two chambers that engage at opposite sides of a sample paper and define a sample area that is smaller than the dimensions of the bands in the paper (p 1, pars 3-6; p 2, par 30). The testing process is automated, with an advancement device (stepping motor and drive rollers) advancing the paper and the testing device actuated while the paper is stopped after each advancement to make a measurement. Based on a first series of measurements, the pattern of bands on the paper is calculated, thus the device is a pattern or band detection device. An attached processor performs the calculations and controls the future actions of the stepper motor and the measurement device during additional testing (p 1, pars 10-14; p 2, pars 31-44; Claim 7).

Cholet does not disclose controlling the measurements using signals from a pattern detection device.

Seymour et al discloses a method for manufacturing cigarettes having banded paper comprising measuring the location of a band 1507 on paper web 55 with a band detector 95 (pattern detector), which generates a signal 1530 that is processed by a servo controller 1525, the servo controller directing the applicator 70, a flying knife cutter 1568 and the speed of the machine to provide correct registration of the bands (Fig. 15; p 19, pars 138-140). It was thus known to those of ordinary skill in the art at the time of the invention to use band detection devices to send signals to control other related processes.

The art of Bokelman et al, Cholet, Seymour et al and the instant invention is analogous as pertaining to the measurement of properties of banded cigarette paper. It would have been obvious to one of ordinary skill in the art to include automated permeability testing using a controller to detect signals from the pattern detection device and to control the paper advancement (drive) device and direct permeability testing in the inspection device of Bokelman et al in view of Cholet and further in view of Seymour et al to provide additional important data with less expenditure of time or money. It would also have been obvious to stop the paper at selected positions so that individual bands could be tested. Contemporaneous control would have been obvious to ensure accurate and efficient measurements. The motivation would have been to provide additional important data with less expenditure of time or money. The band detection and computation procedure of Cholet would not have been necessary with the



combination of Bokelman and Cholet due to the band detection device of Bokelman, again saving time and cost.

Claims 3, 9-15, 17 and 27: Bokelman et al does not disclose that the second bobbin can be used on a cigarette manufacturing device or that the paper examining apparatus and a cigarette manufacturing device can be used together as system. Bokelman et al also does not disclose that the bobbins are interchangeable or that they are adapted to be used on a cigarette manufacturing device.

Bokelman et al teaches that many bobbins of paper must be inspected in a day, thus speed is a significant factor (col 1, lines 15-39). Bokelman et al also discloses that the bobbins are easily and quickly mounted and removed (col 2, lines 34-37). While the use of interchangeable first and second bobbins is not explicitly disclosed by Bokelman et al, it would have been within the general skill of one of ordinary skill in the art to use the same kind of bobbins for both first and second bobbins and to use bobbins that are directly usable on a cigarette manufacturing device to eliminate the need for an additional costly step of rewinding the paper onto a suitable bobbin. It would further have been obvious to use the examined paper on a cigarette manufacturing device, thus establishing a system comprising a cigarette manufacturing device and cigarette paper testing apparatus. It would have been obvious, after removing the fully rewound second bobbin, to replace it with the empty first bobbin to receive the next supply of tested paper.

Claims 7, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bokelman et al in view of Cholet and further in view of Seymour et al and George et al (3032245).

Bokelman et al, Cholet and Seymour et al do not disclose a tension control device comprising a paper engaging member between the first and second bobbins.

George et al disclose a variety of methods used to control tension in a moving web of paper (col 1, lines 9-17). The methods include a belt contacting the supply wheel (brake), spring controlled rollers that contact (operably engage) the web, and a vacuum box, across which the web travels (and operably engages) (col 2, lines 36-51).

The art of Bokelman et al, Cholet, George et al and the instant invention are analogous as solving the problem of controlling of tension in a moving band of paper. It would have been obvious to one of ordinary skill in the art to use one or more of the claimed tension controlling devices in the inspection device of Bokelman et al in view of Cholet and further in view of Seymour et al and George et al as a functionally equivalent option.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DRC

  
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